


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

REC'D 00 FEB 2005

WIPO PCT

Applicant's or agent's file reference PWO-1008		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/CA 03/00875	International filing date (day/month/year) 16.06.2003	Priority date (day/month/year) 04.11.2002	
International Patent Classification (IPC) or both national classification and IPC H04Q7/22			
Applicant RESEARCH IN MOTION LIMITED			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input checked="" type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 14.04.2004		Date of completion of this report 07.02.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Schweitzer, J-C Telephone No. +49 89 2399-8963	



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1. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-15 as originally filed

Claims, Numbers

1-25 as originally filed

Drawings, Sheets

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:

- ☐ restricted the claims.
☒ paid additional fees.
☐ paid additional fees under protest.
☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
☒ not complied with for the following reasons:

see separate sheet

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
☐ the parts relating to claims Nos. .

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3 - 6, 9 - 25
	No: Claims	1, 2, 7, 8
Inventive step (IS)	Yes: Claims	12 - 25
	No: Claims	1- 11
Industrial applicability (IA)	Yes: Claims	1- 25
	No: Claims	

2. Citations and explanations

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see separate sheet

Concerning section IV (unity of invention).

The international preliminary examining authority considers that the present application lacks unity and hence does not comply with the requirements of unity of invention as set forth in Rule 13 PCT.

Indeed, it is considered that two separate inventions are claimed in the present application, without there being any unifying inventive concept common to both, contrary to the requirements of Rule 13.1 PCT.

- Independent **claim 1** relates to a method for establishing a data connection using a back-off timer, wherein a connection request is issued upon expiry of the back-off timer.

- Independent **claim 12** relates to a method for re-establishing a data connection using a service-check timer, wherein a connection request is issued upon expiry of the service-check time and if the previously established data connection is determined to be lost.

The common concept linking together these separate inventions is thus merely the fact that a timer (back-off timer or service-check timer) is generally used to initiate/delay the transmission of a data connection request, which is arguably well-known in the art, cf. for instance the cited document **D1: WO-A-01/47142**, see page 4, lines 1 to 14. Since this common concept is not novel/inventive, the technical relationship between the subject-matter of claims 1 and 12 required by Rule 13.2 PCT is lacking.

Concerning section V.2 (reasoned statement under Article 35(2) PCT)

First invention (claims 1 to 11)

The cited **D1: WO-A-01/47142** already discloses a method (re-)establishing a data connection on a wireless data network, wherein, when it is determined that no data connection is established, i.e. a connection had been released, a back-off timer is initialized based on a previous number of connection requests (attempts) and a connection

request is automatically transmitted upon expiry of said back-off timer, so as to establish a data connection, see **D1**, especially on pages 4 and 5, wherein it is mentioned that the value of the "reconnect timer" may e.g. be quadrupled after each failed connection attempt.

Citation **D1** thus effectively discloses all the subject-matter of claim 1 which hence lacks novelty (Article 33(2) PCT).

The dependent **claims 2 to 11** appear to add nothing of inventive significance to claim 1, as the additional features introduced by said dependent claims refer only to minor implementing details which are known or directly derivable from the cited prior art reference **D1**, e.g. the fact that the claimed method is used in CDMA networks, as per claim 2, or that the back-off timer is (additionally) based on a random seed, as per claims 7 and 8 (see in **D1**, page 13, lines 1 to 24) or fall within the general knowledge or technical competence of a person skilled in the art, e.g. the sending of "refusal or intercept" message or of "retry orders", as per claims 3 to 6.

Thus, dependent claims 2 to 11, either alone or in combination, appear to add nothing of inventive significance to claim 1 to which they are appended and, therefore, these claims cannot be considered to offer a basis for a novel and inventive claim.

Second invention (claims 12 to 25)

The prior art documents cited in the International search report do not seem to be prejudicial to the acceptability of independent (clarified, see below) **claim 12** having regard to the novelty and inventive step (Articles 54 and 56 EPC) of its subject-matter, as none of the cited documents discloses or hints the provision of a "service check timer" as defined in said claim, which permits to automatically re-establish a previously lost data connection, upon expiry of said timer.

Actually, none of the prior art references is concerned with the problem of maintaining an "always-on" data connection and thus gives any incentive for the skilled person to arrive at the claimed automatic disconnect recovery as claimed in accordance with the second invention.

In particular, the cited **D2: US 2002/082033** is only concerned with the release of a

data connection after a predetermined wait period following the end of data transmission.

Claim 12 is therefore novel and considered to involve the required inventive step, Articles 33(2) and (3) PCT. The subject-matter of claim 12 is also industrially applicable.

The same applies to independent device **claim 21**, which is drafted in structural terms and corresponds essentially to a combination of present method claims 1 and 12. Claim 21, therefore, equally meets all the requirements of Article 33 PCT.

Dependent claims **13 to 20 and 22 to 25** relate to further implementing details of the method or device defined by the independent claims to which they refer and are thus equally novel, inventive and industrially applicable.

General remarks concerning clarity of the claims and the form and contents of the application:

For clarity reasons, it should be made clear in **claim 12** that the "service check timer" is actually started when a data connection is established, in accordance with the description given on page 9, line 26, this step (162 in Fig.4) of setting the timer being apparently an essential feature for the understanding and the correct performance of the invention.

The independent claims are not drafted in the proper two-part "characterised" form recommended by Rule 6.3.(b),(I),(ii) PCT, having a preamble that correctly reflects the nearest prior art, presumably that represented by the above noted **D1**.

In order to meet the requirements of Rule 5.1.(a),(ii) PCT, the relevant prior art **D1** should have been acknowledged by reference and briefly discussed in the introductory part of the description.

The claims do not include reference signs in parentheses where features shown in the drawings are referred to, Rule 6.2.(b) PCT.

Finally, on page 1, the reference to the priority document and the corresponding "incorporated by reference" statement should have been deleted, since the application

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should be self-contained (see PCT-Guidelines for Preliminary Examination, PG-II, 4.17).